

APPENDIX 12  
Section 319 Project Implementation Plan Example

**IOWA FY99 SECTION 319 PROJECT IMPLEMENTATION PLAN  
PROJECT #1**

**Project Title:** Staffing of State NPS Program

**Background:** As the state agency having primary responsibility for implementation of Iowa's State Nonpoint Source Management Program (NPSMP), the Department of Natural Resources (DNR) must conduct numerous activities related to implementation of the overall NPSMP and the individual nonpoint pollution control projects being carried out in Iowa.

DNR's responsibilities in implementation of the overall NPSMP include: coordination at a state level of the nonpoint pollution control program and project activities of federal, state, and local agencies; review of federal programs and projects for consistency with the state's NPSMP; and, carrying out a variety of activities essential to implementation of the NPSMP, such as updating the NPSMP to reflect changes in federal and state laws and programs, responding to requests for information and assistance from the public, developing Section 319 grant applications and project implementation plans, and providing EPA with quarterly, annual, and final reports on the state's nonpoint control programs and projects.

DNR's responsibilities for implementation of individual nonpoint pollution control efforts varies from project to project. For those projects receiving Section 319 funds, IDNR's responsibilities are extensive, and include: solicitation and review of project proposals; selection of projects for which funding will be requested and development of grant applications and project implementation plans; negotiation with EPA on project funding; development of contracts or agreements for funded projects; and reporting of project achievements to EPA and the public. In addition, for some projects IDNR has specific direct implementation responsibilities.

**Objectives:** To provide the staffing needed for IDNR to effectively implement Iowa's NPSMP and Section 319 program activities.

**Project Description:** This project will provide Section 319 funding support for six existing positions in the Water Quality Bureau of IDNR to assist in implementation of the state's NPSMP and Section 319 funded implementation projects. These include an Environmental Engineer and two Environmental Specialists fully funded by Section 319 funds, two supervisory positions partially supported with Section 319 funds, and an Environmental Specialist partially supported by Section 319 funds who works on stream ecoregion studies. The duties of this position include providing assistance to projects in developing and implementing appropriate monitoring programs.

Funding is also requested for a new staff position within IDNR. This position is necessary due to the increased work load resulting from the additional Section 319 dollars

allocated to the states, the requirements set forth in managing the NPS program as per the Nine Key Elements of an Effective State Program, and review and update of the Iowa Nonpoint Source Program Management Plan to incorporate these nine key elements, as necessary.

In addition, the project will provide partial funding for an NRCS employee who serves as a Liaison between the NRCS and the IDNR, and full funding for a DSC staff position which provides administrative and technical support for watershed based water quality projects funded by Section 319 and/or Water Protection Project funds.

The staff supported by this project will carry out a variety of state nonpoint source program implementation activities, including:

- coordinating IDNR's nonpoint pollution control efforts with those of other agencies and assisting other agencies in incorporating nonpoint considerations into their programs and projects;
- implementing the Nine Key Elements of an Effective State Program, as identified in the EPA publication "Nonpoint Source Program and Grants Guidance for Fiscal Year 1997 and Future Years", May 1996;
- reviewing and updating the Iowa State Nonpoint Source Program Management Plan (NPSMP) to incorporate the Nine Key Elements identified above;
- reviewing federal programs and projects for consistency with the state NPSMP;
- developing public information materials and responding to public information requests;
- developing contracts with DSC and others agencies and organizations for implementation of Section 319 Projects;
- participating in implementation projects as called for in approved project implementation plans;
- providing GIS System maps to projects as a means to help them identify critical project areas and track and report progress,
- attending annual project reviews,
- reviewing project monthly, quarterly and annual reports;
- developing quarterly and annual progress reports on the State NPS program; and
- reviewing final reports and closing out projects as they are completed.

A new position was requested as part of the FFY97 grant application. IDNR has begun the process to establish this position, and therefore will require continued funding. This position will be handled as a contract position through an agency such as DSC or University of Iowa Hygienic Laboratory. A primary duty of this position will be to provide water quality grant application preparation assistance to SWCDs. This staff person will work closely with SWCD staff and commissioners in the preparation and development of grant applications for both Section 319 and WPF to assure the proposal is appropriate for the funding source and contains all necessary information to enhance funding opportunities.

Funding is also requested for the Volunteer Monitoring Coordinator position. This position is a contract position with the University of Iowa Hygienic Laboratory and staffed in the Information Education Bureau of IDNR. This position provides statewide

assistance to organizations and agencies, including Section 319 sponsored water quality projects, in establishing and implementing volunteer monitoring programs. This position was established during FY98 using carry over funds and continued into FY99 with the FY98 grant funds. This position provides a unique partnering opportunity with agencies and organizations such as the Iowa Environmental Council, NRCS, and the Izaak Walton League of Iowa.

Additional activities are listed on page 63, Chapter 3, "Agency Responsibilities of the NPS Management Plan" and include:

- Request Section 319 project proposals, including proposals addressing non-agricultural problems
- Include selected project proposals in draft Section 319 workplan
- Prepare final Section 319 workplan and grant application
- Prepare reports on Section 319 funded implementation projects for inclusion in state's NPS Annual Report
- Prepare annual Section 319 program report

The IDNR revised Iowa's NPSMP in 1992 and expanded its scope to include non-agricultural sources of nonpoint pollution. This revision added a number of implementation activities for non-agricultural sources to Iowa's NPSMP and expanded on the activities already included for agricultural sources. Activities added include: evaluating the need for and feasibility of establishing a volunteer monitor program covering both urban and agricultural waters; developing a comprehensive public information/education program for non-agricultural nonpoint pollution sources; developing a project demonstrating techniques for construction site erosion control; and, evaluating the effectiveness of the state's ongoing construction site erosion control and hydro-modification laws and programs.

EPA's FY96 Section 319 guidance allows states to utilize up to 20% of their grant funds, up to a maximum of \$250,000 per state, to support a variety of nonpoint source assessment activities. In accordance with this provision, IDNR is proposing to utilize \$70,000 of FY99 Section 319 funds to support the Stream Ecoregion Biocriteria Development Project and \$100,000 to support a study on the Cumulative Water Quality Impacts of Multiple Livestock Operations.

**Stream Ecoregion Biocriteria Development Project:** The primary goal of this ongoing project is to establish standard sampling procedures for Wadeable streams and create a database for development of biological criteria (biocriteria). This project will lead to establishment of a sampling protocol and criteria for objectively determining the status of Iowa's streams with respect to biological integrity and attainment of designated aquatic life uses.

The potential uses for products developed in the biocriteria project include: identification of biologically impaired streams, assessment of the severity and causes of aquatic life impairment, evaluation of the effectiveness of pollution controls and/or habitat improvement measures, and long-term monitoring of ambient biological

stream condition. The project is expected to provide better methods for measuring the extent and severity of nonpoint source pollution impacts in Iowa. The procedures established under this project will be available for use in Section 319 projects to assist in both the preparation of project applications and in evaluation of BMPs established as part of the project.

Section 319 funds will be used to support the fifth and final year of the biocriteria data base acquisition phase. Section 319 funding in subsequent years may be used to evaluate the extent and severity of nonpoint source impacts on Iowa's streams, and the effectiveness of various BMPs intended to mitigate water quality impacts.

### **Study of Cumulative Water Quality Impacts of Multiple Livestock Operations:**

The FY98 Section 319 grant included \$100,000 to support efforts to develop procedures for determining the water quality impacts that multiple livestock operations located in a watershed have, both individually and collectively, on area streams. In the FY99 grant, an additional \$100,000 is requested to continue these efforts. In addition to Section 319 funds, this project is currently receiving \$282,000 in funding support from other sources, including ISU's Center for Agriculture and Rural Development (CARD), the ISU Extension Service (ISUE), and the Texas Institute for Applied Environmental Research (TIAER).

During calendar year 1998, IDNR worked with CARD, TIAER, ISUE, and other state and federal agencies to develop a project work plan which would meet IDNR's objectives for this project, as well as a variety of other project objectives identified by the cooperating agencies. As a result of these efforts, in late 1998 the cooperating agencies agreed to develop and implement a comprehensive water quality monitoring and assessment project in the Upper Maquoketa River watershed.

The Upper Maquoketa River watershed is located in northeast Iowa immediately above and west of Backbone State Park, with the majority of the watershed in Fayette and Clayton Counties. Portions of the river and tributary streams are coldwater streams that support trout. Land use in the watershed is predominately agricultural, with over 60% in continuous row crops and another 20% in rotations. Significant numbers of livestock (primarily swine and dairy) are found on area farms, with livestock operations including open feedlots, confinement operations, and pasture based operations.

The monitoring component of this project was initiated in November 1998 with the installation of automated samplers at a number of watershed sites, including sites located to measure the water quality impacts of runoff from livestock operations and land application areas. Collection of monitoring data from these sites will be initiated early this spring, and will continue at least throughout calendar year 1999. If ongoing efforts to obtain additional funding are successful, the monitoring program will be extended. The collected water quality data will be used to calibrate and test the accuracy of existing watershed models, including models dealing with livestock operations and manure disposal.

In conjunction with this project, local sponsors have requested funding for a comprehensive watershed protection project for the Upper Maquoketa River watershed, as well as for a broader information and education project covering the entire Maquoketa River watershed (the Maquoketa River Alliance Project). A portion of the funding needed to carry out these projects is also being requested as part of this FY99 grant application, with additional support expected to be provided by the state Water Protection Fund, administered by the DSC/IDALS.

Assuming adequate funding is obtained, the monitoring activities will be continued throughout the life of the watershed project. The monitoring results and watershed models will be used throughout the project's life to help determine both the types of BMPs which should be applied within the watershed and the locations where these BMPs should be implemented to have the greatest water quality impacts. In addition, as project activities are implemented, the monitoring results will be used to evaluate how well the models performed in predicting actual water quality improvements.

#### **Wetland and Trout Stream Protection/Restoration Project:**

Beginning in FY94, EPA Region VII included in its Section 319 Grants Guidance a nonpoint source mini-grant program. This program was established to allow states to award small grants to local projects that may not meet all requirements of Region VII's competitive projects' process, but nonetheless are worthy on a local scale. It was designed to allow states to fund small projects without being subject to all of EPA's grant approval and award processes.

Iowa received funding for the Wetland and Trout Stream Protection/Restoration project as part of its FY94 Section 319 grant. Under this grant, IDNR received \$75,000 for projects, with this funding being divided roughly equally between wetland and trout stream projects. Funding for this project was also received in FY95, FY96, FY97 and FY98, at a \$50,000 level each year.

This project will continue the process originated in FY94 and utilize FY99 Section 319 funds to support low cost water resource protection, enhancement, or restoration activities on coldwater streams, lakes, or wetlands. The types of activities that will be considered for funding include: riparian corridor protection; habitat enhancement of coldwater streams; wetland development adjacent to a waterbody; sediment or nutrient dikes within or adjacent to a lake; lake shore erosion control practices; in-lake habitat improvements; creation, restoration, or enhancement of wetlands; wildlife habitat restoration or enhancement within or adjacent to a wetland; etc.

**Link to the Management Program:** This project addresses the following objectives found in chapter 3, Work Element #1, "Statewide Implementation", and Work Element #3, "Establishing Additional Nonpoint Control Projects" of Iowa's NPSMP:

"to conduct those program coordination, public information and education, and program administration and management activities

essential to the effective implementation of the state nonpoint source management program but not included in the other management program components", and

“to develop, obtain funding for, and initiate additional nonpoint pollution control projects. Individual projects may be designed to accomplish one or more of the following:

- reduce movement of nonpoint pollution to groundwaters
- evaluate effectiveness of individual BMPs or BMP combinations
- assess feasibility and effectiveness of alternative approaches to accomplishing nonpoint control
- establish demonstration projects throughout the state to inform and educate landowners and the general public on the use of various BMPs and to demonstrate their effectiveness in improving water quality”

**Schedule of Activities:**

State NPS Program Implementation	Ongoing
Develop Public Information Materials	Ongoing
Review Quarterly and Annual Section 319 Project Reports	Ongoing
Attend Annual Project Review meetings and Review Quarterly and Annual Reports	Ongoing
ADWs Implementation	Ongoing
Develop Contracts for FY99 Section 319 Funded Projects	July - Sept. 1999
Interagency NPS Coordination	Ongoing
Develop Draft FY2000 Section 319 Workplan	October – Dec. 1999
Section 319 Annual Report to EPA	Dec. 1999
EPA Comments on Draft FY00 Section 319 Workplan	February 2000
Final Grant Application and Workplan for FY00 Section 319 Funds	March 2000
Grant Award – FY00 Section 319 Funds	April 2000
Develop Contracts for New Project Funded with FY00 Section 319 Grant Funds	July - Sept. 2000
Draft Workplan for FY01 Section 319 Funds	Aug. 2000

## CONTRACT PROJECTS

### Stream Ecoregion Project

Stream Sampling	June - November 1999
Sample Processing	June 1999 - March 2000
Data entry and verification	June 1999 - April 2000
Data analysis and interpretation	Sept. 1999 - May 2000
Final Report Preparation	March - June 2000

### Volunteer Monitoring Coordinator

Develop Five-Year Plan of Action	October 1999
Training of volunteer group leaders	ongoing
Develop network of statewide volunteer monitors	ongoing
Continue assessment/revision of manual	ongoing
Develop accessible and comprehensive database	ongoing
Develop additional resource material	ongoing

### Water Quality Impact Study

Continue water quality monitoring	Sept.- Dec. 1999
Watershed Program developed	October 1999
BMP implementation	December 1999
Report of second year activities	December 1999

### Wetland/Trout Stream Restoration/Enhancement

Complete/obtain EPA approval for overall program implementation workplan	October 1999
Compile list of potential projects	November 1999
Select projects to be funded	December 1999
Develop and submit draft implementation plans for prospective projects to IDNR/EPD	January – August 2000
Complete implementation of practices outlined in approved project implementation plan	April – September 2000
Provide notice to news media of project activities, completion and accomplishments	As project implementation occurs
Complete photo-documentation of project activities and implementation	As project implementation occurs
Submit Quarterly Reports	January, April, July, and October 2000
Submit Final Report to IDNR/EPD	October 2000
Submit Final Report to EPA	December 2000

**Outputs:** These staff positions will increase the effectiveness and efficiency of the state's NPS pollution control program as well as the USEPA Section 319 Program; improve interagency cooperation related to nonpoint pollution; result in reports and workplans required for the Section 319 program and other nonpoint source programs, and ensure effective implementation and administration of Iowa's nonpoint source management program.

**Measures of Success:** Implementation projects will reduce the effects of NPS pollution on the state's publicly owned lakes, priority Class B(C) streams and other waters; increased interagency cooperation; reports will measure implementation progress and environmental improvements, tracking records and reports will measure success in implementation and administration of state's nonpoint source programs and projects.

**Partnerships:** The EPD/DNR has primary responsibility for implementing the state NPSMP and the Section 319 Program. Other divisions of IDNR and other agencies involved in nonpoint pollution control will cooperate as partners in the effort, and include NRCS, FSA, ISU Extension Service, DSC/IDALS, and the Leopold Center for Sustainable Agriculture.

**Project Cost/Funding Sources**

**FY00 Budget:**

**Salary, Benefits**

Darrell McAllister	(25%)	
Jack Riessen	(50%)	
Ubbo Agena	(100%)	
Rebecca Schwiete	(100%)	
Marie Leat	(100%)	
Tom Wilton	(50%)	
Additional Staff Position	(100%)	
Total salary/benefits		\$320,900

**Indirect Costs**

40,000

**Contractual**

**Staffing**

NRCS Liaison	\$30,000	
(Tom Oswald)		
Contract Position	69,100	
(Bill Bryant-DSC)		
Application Assistance	60,000	
Position		
Volunteer Monitoring		
Coordinator	35,000	
Contractual Staffing Total		194,100



Other		
Ecoregion Study	70,000	
Water Quality Impact Study	100,000	
Wetland/Trout Stream	50,000	
Restoration/Enhancement		
Contractual Other Total		\$220,000
Travel/Training/Supplies/Other		<u>20,000</u>
<b>Total FY99 Section 319 Funding Request</b>		<b>\$795,000</b>